

Claims

1. Polymer-based lacquer paint, characterised in that in addition to the lacquer paint constituents which are usual per se, it contains suitable conductive additives, by which the lacquer paint is provided with anti-static properties.

2. Lacquer paint according to claim 1, characterised in that the conductive additives are chosen from soots having conductivity, metal powders, conductively coated mica flakes, fine-particle  $\text{SnO}_2$ , which is surface-treated or is not surface-treated, semiconductor-doped  $\text{TiO}_2$ , semiconductor-doped  $\text{BaSO}_4$  and/or organic additives.

3. Lacquer paint according to claim 1 or 2, characterised in that the amount of conductive additives in the polymer matrix of the lacquer paint that is required for the anti-static provision and the resulting conductivity of the overall system are determined by the percolation theory.

4. Lacquer paint according to one or more of claims 1 to 3, characterised in that it contains a combination of conductive additives in accordance with claim 2 with non-conductive fillers/pigments.

5. Lacquer paint according to one or more of claims 1 to 4, characterised in that it has a surface resistance of  $10^2$  to  $10^9$  Ohm.

6. Lacquer paint according to one or more of claims 1 to 5, characterised in that it contains 5 to 35% 'PVC' of conductive additives and/or non-conductive fillers/pigments.

7. Lacquer paint according to one or more of claims 1 to 6, characterised in that electrically conductive  $\text{BaSO}_4$  is used as the electrically conductive additive.

8. Lacquer paint according to claim 7, characterised in that  $\text{BaSO}_4$  particles which are sheathed

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with a layer of  $\text{Sb}_2\text{O}_3$ -doped  $\text{SnO}_2$  are used as the electrically conductive  $\text{BaSO}_4$ .

5 9. Lacquer paint according to one or more of claims 1 to 6, characterised in that rutile-based transparent  $\text{TiO}_2$  is used as the electrically conductive added substance.

10 10. Lacquer paint according to claim 9, characterised in that 0.05 - 20.0% 'PVC' transparent  $\text{TiO}_2$ , preferably with a crystallite size of 5 - 50 nm, is used.

11. Lacquer paint according to claim 9 or 10, characterised in that the  $\text{TiO}_2$  particles to be used have an inorganic doping, preferably of aluminum oxide or zirconium oxide.

15 12. Lacquer paint according to one or more of claims 1 to 11, characterised in that cellulose acetate butyrate/polyester/melamine resin is used as the polymer base.

20 13. Lacquer paint according to one or more of claims 1 to 12, characterised in that a controlled flocculation is generated.

25 14. Lacquer paint according to claim 13, characterised in that the controlled flocculation is generated by additives which are known per se and/or the addition of comparatively less thermodynamically favourable solvents.

15. Use of a lacquer paint in accordance with one or more of claims 1 to 14 for providing plastics with anti-static properties.

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